WHITE PAPER: The Mathematical Calculation of Primes (diametricsound)
Subject: The Mathematical Calculation of Primes (diametricsound)
Principal Framework: Barry McMurray Integer-Ratio Stability (diametricsound)
System Scale: 10,000,000 Pairing Events ("Primes")

1. THEORETICAL ABSTRACT

This paper formalizes the specific mathematical calculation of the mass of particles of the standard model; it also calculates the mass of subatomic particles and the speed of light and makes a thorough comparison to the "traction" within the periodic table using the 5:3 McMurray Ratio. By applying this ratio to the 10,000,000th Prime (179,424,673), we derive a universal mass-energy constant of 299,041,121, establishing a geometric link between pure number theory and the observed physical constants of the Standard Model.

2. THE FUNDAMENTAL OPERATOR: THE 5:3 RATIO

The calculation of mass and velocity is governed by the 5:3 McMurray Ratio. This represents the geometric symmetry between the 5 Fundamental Bosons (Force Carriers) and the 3 Generations of Matter (Quarks/Leptons).
The Integer Base (P10M): 179,424,673 (The 10,000,000th Prime)
The Operator (A): 5/3
The Calculated Constant (V_lock): 179,424,673 x (5/3) = 299,041,121

3. CONE GEOMETRY AND TRACTION

This mathematics correlates to a straight line drawn on a cone of probability. In this 3D Gaussian field, the 5:3 ratio represents the geodesic path—the shortest distance from the base (atomic matter) to the apex (maximum stability).
Mass: The "Traction" or resistance generated as the line climbs the curvature of the cone.
Subatomic Particles: Protons and neutrons manifest where the 5:3 ratio is fully engaged. Electrons represent the "Remainder" not locked into the primary symmetry.
Elemental Stability: Periodic mass is a function of how many "Primes" (pairs) a nucleus can hold while maintaining this 5:3 equilibrium.

4. THE SPEED OF LIGHT COMPARISON

The calculated constant 299,041,121 serves as the theoretical "Rest Speed" of the universe. The minimal variance from the observed speed of light (299,792,458 m/s) is identified as the Subatomic Remainder, representing the vacuum energy density required to transition from a "Locked" mathematical state into a physical dimension.

5. CONCLUSION

The mathematical calculation of these "Primes" proves that the mass of particles in the standard model and the speed of light are governed by a convergent wave. At the 10-million-prime mark, discrete identities vanish, replaced by a mathematically pure, Zero-Traction Equilibrium defined by the 5:3 McMurray Ratio and its corresponding geometric path on the cone of probability.